ABSTRACT

The invention provides a process for forming a catalyst for use in the polymerization of olefins. This process comprises reacting a chlorinating agent with a magnesium alkoxide compound to form a magnesium-titanium-alkoxide adduct, followed by reacting the magnesium-titanium-alkoxide adduct with an alkylchloride compound, e.g., benzoyl chloride, to form a magnesium chloride support. The support is then reacted with titanium tetrachloride to form a highly active catalyst useful for the production of polyolefins.